RATE BASE

A. Use of Test Year-End Rate Base

The Company's calculation of rate base began with total utility plant in service per its books as of the end of the test year, December 31, 1991 (Exh. BSG-3, p. 15). With the exception of certain adjustments reflective of the Company's proposal to adopt the full accrual basis of recording the liability of certain post-retirement benefits, infra, all additions and subtractions to utility plant were test year-end amounts (id., 15-17).

1. Positions of the Parties

a. The Attorney General

The Attorney General urges the Department to return to its previous policy of using test-year average rate base (Attorney General Brief, p. 7). The Attorney General states that prior to its decision in Policy Statements for the Commission Concerning the Adoption of Year End Rate Base, D.P.U. 160 (1981), the Department adhered to a long standing practice of calculating rate base using the average level throughout the test year (id., p. 5). The Attorney General argues that high rates of inflation in the late 1970's and early 1980's caused the Department to depart from test-year average rate base to mitigate the effects of attrition and regulatory lag (id., p. 6). The Attorney General contends that absent the extraordinary inflation which caused the adoption of test year-end rate base, the use of test

year-end rate base in conjunction with test year sales creates a mismatch which is unfair to ratepayers (id., p. 7). The Attorney General states that the Department is not required to hold a rulemaking to change its rate base standard and may decide policy issues in an adjudicatory proceeding such as this (Attorney General Reply Brief, p. 8, citing Massachusetts Electric Company v. D.P.U., 383 Mass. 675, 679 (1981)).

b. The Company

The Company maintains that the use of test year-end rate base is appropriate and consistent with Department precedent (Company Brief, p. 21). The Company argues that test-year average rate base, and not test year-end rate base, creates a mismatch between revenues and expenses because it fails to reflect that the Company expands its rate base each year with non-revenue producing investments to improve its distribution system and conform with safety regulations regardless of any growth in sales (id., p. 22). Bay State argues that these conditions, attrition and regulatory lag, led the Department to adopt test year-end rate base (id.

Finally, the Company argues that the Department should reject the Attorney General's proposal because he failed to raise this issue prior to his initial brief (id., pp. 21, 23). The Company contends that such a drastic change in the Department's standard should occur via a generic rulemaking or policy pronouncement (id.

2. Analysis and Findings

The Department agrees with the Attorney General that it need not hold a rulemaking to change its rate base standard. However, the Attorney General raised the issue of a change to test-year average rate base for the first time on brief and, therefore, did not provide sufficient notice to allow Bay State, other affected parties, and especially the Department to properly address proposed change. Nor has the Attorney General presented any evidence or convincing argument in support of its request that the Department change its present policy. Accordingly, the Department rejects the Attorney General's recommendation to return to the use of test-year average rate base.

As the Company has noted, test year-end rate base partially addresses the problem of capital attrition. Additionally, Department has found that test year-end rate base more accurately reflects plant in service during the year when new rates take effect regardless of the rate of inflation. Massachusetts Electric Company, D.P.U. 92-78, p. 5 (1992). Accordingly, Department finds that the Company's use of test year-end rate base is appropriate.

B. Intangible Plant

The Company included in its calculation of rate base $1,997,186 of intangible plant, consisting of $1,561,660 in Account 303, which is primarily software costs, and $435,526 in Account 301, which is organization costs (Exh. DOER-20;

Exh. AG-92, Attachment, p. 8; Exh. AG-266, Bay State 1991 Annual Return to the Department, p. 17). The $435,526 of organization costs consist of $135,854 for the 1973 merger of Bay State Gas Company and Lawrence Gas Company, $288,325 for the 1974 merger of Bay State Gas Company and Brockton-Taunton Gas Company and $11,347 for the 1990 reorganization of Granite State Transmission (id.; Tr. VI, pp. 96-98; Exh. AG-116). The Company also proposed to include amortization of its organization costs as a cost of service expense, See Section VI, K, infra.

1. Positions of the Parties

a. The Attorney General

The Attorney General argues that including intangible plant in rate base allows the Company to earn a return on the unamortized balance which the Department has consistently rejected (Attorney General Brief, p. 14). With regard to software costs, the Attorney General argues that these costs are akin to an extraordinary expense, which according to Department precedent, are not allowed in rate base (Attorney General Reply Brief, p. 9).

With regard to organization costs, the Attorney General contends that these costs benefit the Company's shareholders and should thus be denied (Attorney General Brief, p. 14). The Attorney General further argues that, consistent with Bay State Gas Company, D.P.U. 1122 (1980), the Department should exclude organization costs from the Company's rate base and its cost of

service because the Company failed to demonstrate why these costs should be recovered from ratepayers (Attorney General Reply Brief, p. 10). In Bay State Gas Company, D.P.U. 1122 (1980), the Department did not allow the Company to include any costs associated with its merger with Northern Utilities, Inc. in the Company's rate base or its cost of service because the Company did not demonstrate that the merger had resulted in benefits to Bay State's ratepayers. Id., pp. 10, 36.

b. The Company

The Company maintains that software costs qualify as long-lived assets under Generally Accepted Accounting Principles ("GAAP"), which require that they be capitalized and depreciated over the useful life of the asset (Company Brief, p. 28). Bay State argues that software is a routine and continuing requirement in all areas of its business and that the Attorney General's claim that software costs constitute extraordinary expenses is both illogical and without evidentiary support (Company Reply Brief, pp. 13-14). Bay State asserts that if its software costs are not included in rate base it would have to expense the full amount of these costs (Company Brief, p. 29) Therefore, the Company maintains that its proposed rate base treatment of software costs provides an appropriate recovery of a legitimate expense (id.).

With regard to organization costs, the Company maintains that these costs are primarily related to the consolidation of

the predecessor companies which now make up the Bay State's Massachusetts operations (Company Reply Brief, p. 15). The Company asserts that, therefore, D.P.U. 1122 does not apply here because that case addressed Bay State's merger with Northern, a local distribution company ("LDC") operating in New Hampshire and Maine. Id., pp. 10, 36. Additionally, the Company argues that, in approving the underlying mergers, the Department explicitly recognized that these mergers would benefit ratepayers (id., p. 14). Finally, the Company asserts that the inclusion of the merger costs in question in its cost of service and the unamortized balance in its rate base has been approved by the Department in previous rate cases (id., pp. 15-16, citing Bay State Gas Company, D.P.U. 19497 (1978), Bay State Gas Company D.P.U. 1122 (1982)).

2. Analysis and Findings

The issue presented is whether or not it is appropriate to include in rate base the Company's intangible plant, consisting primarily of software and organization costs. With regard to software costs, such expenditures are a routine and continuing part of the Company's business and the Department has previously held that they are recurring in nature. Commonwealth Electric Company, D.P.U. 89-114/90-331/91-80 Phase One, pp. 152-153 (1991). The Attorney General's argument that the Company's software expenditures are akin to an extraordinary expense is inconsistent with the level and nature of the expenditures. The

Department finds software is an investment which benefits ratepayers for more than one year and is appropriately included in rate base.

The Department has previously approved inclusion in rate base of the organization costs related to the mergers of Lawrence Gas Company, Brockton-Taunton Gas Company and Bay State Gas Company, the predecessor companies that now comprise Bay State's retail Massachusetts operations. Bay State Gas Company, D.P.U. 1122 (1982). The Department finds that the Attorney General's argument that excluding such costs is consistent with Bay State Gas Company, D.P.U. 1122 (1982) is not supported by our findings in that case. Accordingly, those costs may continue to be included in the Company's rate base.

The Department has not, however, addressed the ratemaking treatment of the costs associated with the reorganization of Granite State prior to the instant proceeding. Granite State, although a subsidiary of Bay State, owns and operates interstate gas pipelines which provide gas supplies to numerous New England utilities. Moreover, Bay State's ratepayers pay Granite State the gas supplied to them. The Company has not demonstrated the Granite State reorganization costs are appropriately included in Bay State's rate base. See Section VIII.AA, infra. Consequently, we find that the unamortized balance of the Granite State merger costs should not be accorded rate base treatment Accordingly, the Department directs the Company to remove fro

its rate base $11,347 associated with the reorganization of Granite State.

C. Special Deposits

The Company included $444,155 of special deposits in its calculation of rate base (Exh. BSG-3, p. 15). The Company is required by its Blue Cross/Blue Shield and prescription drug programs to maintain deposits with the program providers (Exh. DPU-84). These deposits are held by the program provider until the end of the program and are then either returned to the Company or applied to subsequent claims, without interest (Tr. XV, pp. 77-78).

1. Positions of the Parties

a. The Attorney General

The Attorney General contends that the Company's special deposits are actually prepayments that are provided for in the cash working capital allowance for operations and maintenance expenses (Attorney General Reply Brief, p. 10). The Attorney General asserts that since the Company has not performed a full lead-lag study that excluded prepayments, the $444,155 of special deposits should be removed from rate base (id.

b. The Company

The Company maintains that special deposits are not prepayments because they are never transferred to expense accounts and, therefore, are not captured by the working capital allowance for operations and maintenance expense (Co ~any Reply

Brief, p. 16). The Company points out that the Attorney General raises the issue of prepayments for the first time in his Reply Brief (id.) The Company contends that special deposits are similar to customer deposits (id., p. 17). The Company contends that if special deposits are not allowed in rate base, customer deposits should also not be deducted from rate base because these deposits should be treated consistently (id.).

2. Analysis and Findings

The Department has found the 45-day working capital convention accounts for numerous additions and offsets to rate base, such as prepayments of insurance. The Berkshire Gas Company, D.P.U. 90-121, pp. 72-73 (1990); Boston Gas Company, D.P.U. 88-67, p. 62 (1988); Boston Edison Company, D.P.U. 84-25, pp. 59-61 (1984). The Department also has found that compensating balances, deposits required by some lending institutions, are not allowable in rate base because of the overlap between such deposits and borrowings a utility is likely to make from the institution. Boston Edison Company D.P.U. 18515, pp. 7-9 (1976); Fitchburg Gas and Electric Light Company, D.P.U. 19084, p. 17 (1977)

Although the special deposits are required by the Company's Blue Cross/Blue Shield and prescription drug program providers, according to the Company's own witness, special deposits may be applied to claims on the insurance programs for which they are held (Tr. XV, pp. 77-78). Thus the special deposits are similar

to prepayments. Special deposits are also similar to compensating balances because they are required by a third-party for its benefit. Therefore, the Department finds that the Company's special deposits are similar to prepayments and compensating balances and should be treated in a like manner. Accordingly, the Department directs the Company to remove from rate base $444,155 associated with special deposits.

D. Reserve for Deferred Taxes

The Company adjusted its test year-end rate base by $1,068,894 to reflect the effect of its proposal to adopt the full accrual basis of recording the liability for post-retirement benefits other than pensions ("PBOPS"), discussed in Section VIII.CC, infra, in its reserve for deferred taxes (Exh. BSG-3, p. 16; Sch. BSG 3-18).

1. Positions of the Parties

a. The Attorney General

The Attorney General argues that the proposed reserve deferred taxes adjustment to rate base should be rejected because it is both post-test year and not known and measurable (Attorney General Brief, p. 14). The Attorney General asserts that proposed adjustment is not known and measurable because it is based on assumed levels of tax deductions for the Company's PBOPS, which are not known (id.)

b. The Company

Bay State did not specifically address this issue on brief.

However, in the Company's prefiled testimony, the Company's witness asserted that the adjustment to test year-end rate was necessary to provide the reserve for deferred taxes that result from the timing difference between book and tax expense when the liability for PBOPS is recorded (Exh. BSG-3, pp. 16-17).

2. Analysis and Findings

The Department addressed the Company's proposal to adopt the full accrual basis of recording the liability for PBOPS in Section VIII.CC, infra. Based on the Department's findings on this issue a post test-year adjustment to the reserve for deferred taxes in rate base for PBOPS is moot. Accordingly, Department directs the Company to remove the $1,068,894 adjustment to its reserve for deferred taxes from its rate base.

E. Working Capital

In its day-to-day operations, the Company requires working capital to pay for its O&M expenses and purchased gas expenses because of the time lag between the Company's payment for such expenses and the customer's payment for service. Working capital is provided for either from funds internally generated by the Company (i.e., retained earnings) or from short-term borrowings. Department precedent entitles the Company to be reimbursed for the costs associated with the use of its funds or for the interest expense it incurs for borrowings through working capital allowances. Western Massachusetts Electric Company, D.P.U. 87-260, pp. 22-23 (1988). Bay State proposed two separate

working capital calculations and allowances, one for O&M expenses and one for purchased gas (Exh. BSG-3, p. 16; Exh. BSG-4, p. 4)

1. O&M Working Capital Allowance

The Company's proposed O&M working capital allowance of $10,138,903 consists of the allowance for other O&M expenses ($7,975,133) and the average of thirteen monthly balances of materials and supplies ($2,163,770) (Exh. BSG-3, p. 16; Sch. BSG 3-17, Revised, p. 1). The Company calculated the allowance for other O&M expenses using the 45-day convention whereby it multiplied its proposed proforma O&M expense by 12.33 percent (45 days/365 days) (id.; Sch. BSG 3-2, Revised)

No parties objected to the Company's calculation of O&M working capital allowance. The Department finds that the 45-day convention and average of thirteen monthly balances of materials and supplies is appropriate in computing the Company's O&M working capital allowance as set forth in Schedule 6, infra.

2. Purchased Gas Working Capital Allowance

Although the Company collects its purchased gas working capital costs through the cost of gas adjustment clause ("CGAC") rather than through base rates, the Company must present an updated calculation of purchased gas working capital costs as part of a base rate proceeding so that it may update its purchased gas working capital costs in its next CGAC (Exh. BSG-4, pp. 4-7)

The Company calculated its purchased gas working capital

allowance using a lead/lag study to derive the number of days between when Bay State pays its suppliers for gas (lead days) and when its customers pay Bay State for that gas (lag days) (id.). The Company calculated separate lead days for each of its gas suppliers based on the number of days between the mid-point of the month when the Company purchased gas and the actual date the Company paid for that gas (id.

The Company calculated separate lag days for computer billed firm and interruptible customers, manually billed interruptible customers and manually billed off-system customers (id. For computer billed firm and interruptible customers, the Company based the lag days on the number of days between: (1 the midpoint of the month when a customer used gas and when the customer's meter is read (15.2 days); (2) when the customer's meter is read and when the customer's bill is mailed (the "read-to-bill period"), including an adjustment of 1.29 days to account for weekends and non-work holidays (5.29 days in total); and (3) when the customer's bill becomes part of accounts receivable and when it is paid (51.8 days) (id.; RR-AG-33). For manually billed interruptible customers and manually billed off-system customers, the Company based the lag days on the number of days between the mid-point of the month when the customer used the gas and the date the customer paid for that gas (Exh. BSG-4, pp. 6-7).

B(ı lead days and lag days are weighted average figures

based on the weighted average of the number of days and the level of corresponding expense or revenue (id.).

a. Positions of the Parties

i. The Attorney General

The Attorney General argues that the Company's purchased gas working capital allowance is based on an erroneously calculated lead/lag study (Attorney General Brief, p. 8). The Attorney General contends that Bay State understated the lead day portion of its lead/lag study by calculating 37.6 lead days associated with purchases from Granite State, while Granite State itself utilized a 45-day lag period for its O&M cash working capital in most recent regulatory filing for the twelve months ended March 31, 1991 (id., pp. 12-13).

With regard to revenue lag days, the Attorney General contends that the Company overstated the components of the revenue lag calculation (id., pp. 9-12). The Attorney General argues that the Company overstated the 5.29 day read-to-bill period by a total of 2.29 days: one day adjustment included as a "safety net" in case something goes wrong such as a storm; and the 1.29 day adjustment to account for weekends and holiday non-workdays, which is based on a planned billing schedule for the test year rather than an actual billing schedule (id., 9-10). The Attorney General argues that the Company also did not take the reduced meter reading time associated with the implementation of its METSCAN meter reading program, infra, into

consideration in its calculation of the read-to-bill period (id., p. 11).[29] The Attorney General does not quantify the amount of the Company would save as a result of the METSCAN program (id.).

The Attorney General argues that the Company should begin payment lag on day three, the day accounts receivable are booked, rather than on day 5.29, the day bills are mailed (id., 10-11). The Attorney General states that since the Company's customer payment lag is based on accounts receivable balances, the customer payment lag begins, and, conversely, the billing lag ends, when the accounts receivable are booked (id.

The Attorney General argues that the Company's understated expense lead days and inflated revenue lag days result in inflated allowances for both purchased gas working capital and O&M working capital (id., p. 9). The Attorney General asserts that the arguments made above should be rectified, increasing the Company's purchased gas working capital net lead days to 40.6 and reducing its net lead/lag days for both gas and non-gas O&M by 2.29 days (id., pp. 12-13).

ii. The Company

The Company asserts that the factual underpinnings of the

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[29] The METSCAN program is automated meter reading software designed to eliminate estimated meter readings and meter access problems and to reduce meter reading costs (RR-DOER-7; RR-DOER-13). Bay State estimates its implementation of the METSCAN program to take seven years (id.). METSCAN is discussed in Section VIII.K, infra.

Attorney General's contention that the expense lead for Granite State is overstated are incorrect (Company Brief, pp. 26-27). The Company states that the 45-day net lag period cited by the Attorney General was presented by Northern, not Granite State, in its most recent rate case filing in New Hampshire (id.). The Company further argues that the O&M expense lag days experienced by Northern or Granite State are irrelevant to Bay State's purchased gas cost cash working requirement (id.).

The Company asserts that it did not overstate the read-to-bill period (id., p. 24). The Company contends that the additional day referred to by the Attorney General as a "safety net" is necessary to perform the billing function (id.) The Company asserts that the 1.29 days added to the read-to-bill period to account for weekends and holiday non-work days was based on an actual schedule (id., p. 25). The Company further argues that regardless of whether the schedule used was actual or planned, weekends and holidays are not workdays and must be counted when assessing the number of days required to perform the billing function (id. Addressing the Attorney General's contention that the time saving benefits of the METSCAN system should be factored into the determination of the read-to-bill period, the Company asserts that any benefits from the recently implemented system are not known at this time and are not expected to occur for several years (id.).

The Company agrees with the Attorney General, however, that

it should begin its payment lag on day three when the accounts receivable are booked for computer billed firm customers (id. p. 24).

b. Analysis and Findings

The issue to be decided is the accuracy of the lead/lag study presented by the Company to support its proposed purchased gas working capital adjustment. With regard to the lead factor portion of this study, the Company correctly notes that the Attorney General based his arguments against the lead factor proposed for Granite State on inappropriate and inapplicable information. The O&M expenses lag factors of either Northern or Granite have no bearing on the purchased gas working capital lead factors of Bay State. The Company calculated its lead days in accordance with Department precedent. Commonwealth Electric Company, D.P.U. 89-114/90-331/91-80 Phase One, p. 10 (1991). Accordingly, the Department finds that the Company correctly calculated the lead factor portion of its proposed lead/lag study.

With regard to the read-to-bill period for computer billed customers, the Department finds that the Company did not provide compelling evidence to support its position that the additional day included for storms, etc. is regularly required to perform the billing function. Therefore, the Department orders the Company to reduce its read-to-bill lag for computer billed customers by one day.

With regard to weekends and non-work holidays, the Department agrees with the Company that such days must be accounted for in the calculation of the billing period. The Department finds that the Company correctly accounted for weekends and non-work holidays in its determination of read-to-bill period. Accordingly, the Department denies the Attorney General's request to reduce the Company's read-to-bill lag by an additional 1.29 days

With regard to the METSCAN program, the Attorney General does not quantify the purported time savings to be realized by the Company. The Department finds that there is insufficient evidence to quantify any time savings benefits from the Company's implementation of the METSCAN system

The Company and the Attorney General agree that the payment lag for computer billed firm customers should be reduced by one day to account for the fact the payment lag, which is based on the aging of accounts receivable begins on the date of billing, day three of the read-to-bill period, and not on the date of mailing, day four of the read-to-bill period. The Department finds this revision is appropriate.

In accordance with the above ordered revisions, the Department orders the Company to recompute the computer billed customer portion of its lead/lag study as shown on Exhibit BSG-4, Workpaper 4-2, p. 7, Col. 4 in its compliance filing.

F. Allocation of Propane Facilities to the Retail Propane Business

Bay State operates a retail propane division which shares a propane production and storage facility on Meadow Lane in Brockton with the gas distribution business (Tr. XVII, pp. 48-56; Tr. XVIII, pp. 40-41; Exh. AG-70). Various costs incurred by both businesses are allocated between the two divisions (id.

1. Positions of the Parties

a. The Attorney General

The Attorney General asserts that the Company's allocation of excess capacity at the Meadow Lane facility based on month-end inventory unfairly underallocates costs to the retail propane division (Attorney General Brief, pp. 49-50). The Attorney General argues that a more equitable allocation method would be based upon total annual through-put (id., p. 50). The Attorney General contends that this would also necessitate an adjustment of the allocation made for land and structure, resulting in a total adjustment to the Company's rate base of $187,188[30] (id., Attorney General Reply Brief, p. 19).

b. The Company

The Company asserts that the Attorney General's proposed method does not accurately reflect cost causation and therefore should be rejected (Company Brief, p. 85). The Company argues

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30 The Attorney General's initial proposed adjustment to rate base differed from this amount. On brief, Bay State noted that the Attorney General mistakenly added the accumulated depreciation to gross plant rather than subtracting it (Company Brief, p. 86). The Attorney General accepted the Company's revised calculation of its proposed adjustmer (AG Reply Brief, p. 19).

that the number of tanks needed by each business is dependent upon capacity needed at any given time, and therefore, inventory is the best means of measurement (id.). The Company also asserts that the test year was warmer than normal and that consequently the tanks were full of utility inventory throughout the winter. Therefore, the Company asserts, the Attorney General's proposed allocation method would underallocate costs to utility customers who should bear reponsibility for these costs (id.).

2. Analysis and Findings

We find that a certain level of costs incurred at the Meadow Lane facility are incurred as a result of the gas distribution business' need to retain adequate propane supply to fill its potential peak load and that therefore Bay State's ratepayers must bear responsibility for a portion of these costs. Because the Attorney General's proposed method of allocating costs does not take into consideration the storage needs of the gas distribution business, we find that the proposed adjustment is inappropriate and unsupported by the record in this proceeding. However, we also find that the Company's current procedure may not represent the most accurate method of allocating costs between the two divisions. Accordingly, we direct the Company in its next rate filing to propose an alternative method of allocation consistent with Department precedent. See The Berkshire Gas Company, D.P.U. 90-121 (1990).

G. Conclusion

The Department orders the Company to reduce it proposed rate base by the following adjustments ordered supra: (1) $554,498 reduction to utility plant for CNG utility plant; (2) $39,700 increase to reserve for depreciation for CNG utility plant; (3) $11,347 reduction to utility plant for costs associated with the reorganization of Granite State; (4) $444,155 reduction to the additions to rate base for special deposits; and (5) $1,068,894 reduction to the deductions to rate base (which has the net effect of increasing the deductions to rate base) for the reserve for deferred taxes.

VII. REVENUES

A Weather Normalization Adjustment

In its initial filing, Bay State proposed a $2,782,682 increase to test year non-gas revenues to compensate for warmer-than-normal weather (Exh. BSG-5, p. 6). In response to RR-DOER-4, the Company provided the results of its revised weather normalization calculation which results in an adjustment of $2,567,845.

In calculating its weather normalization adjustment ("WNA"), Bay State did the following: (1) determined the difference between test year weather and normal weather using effective degree-days;[31] (2) calculated the weather-related variance in sales volumes for each rate class on a monthly basis;

developed the incremental billing rate for each rate class based upon whether the monthly average usage for the class fell within the headblock or the tailblock; and (4) applied the incremental billing rate to the weather-related variance in sales volume for each rate class, to produce the total revenue adjustment for the Company (id., pp. 7-9). Bay State's proposed WNA includes two proposed modifications to Department precedent:

use of effective degree days rather than degree days; and

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[31] Degree days represent the difference between an average temperature for a given day and a base temperature of 65 degrees Fahrenheit, the lowest temperature for which heating load is not required. Effective degree days express the correlation between various weather conditions and heating requirements by adjusting t[illegible]perature degree days to factor in wind speed (Exh. BSG-5, p. 9)

(2) the proposed modification of the incremental billing rate (Company Brief, pp. 131-132).

Positions of the Parties

a. The Attorney General

The Attorney General addressed only the Company's proposed incremental billing rate, noting that because the Company's proposal does not allow for crossover from the tailblock to the headblock, it deviates from Department precedent (Attorney General Brief, pp. 80-81, citing Commonwealth Gas Company D.P.U. 87-122, pp. 27-28 (1988); Boston Gas Company, D.P.U. 88-67, p. 70 (1988) The Attorney General argues that the Company should calculate the WNA using the weighted average of the head and tail blocks in accordance with Department precedent (id., p. 81).

b. The Company

Although it did not specifically address its proposed use of effective degree days on brief, in its prefiled testimony, the Company asserts that heating sales correlate strongly with temperature and accompanying wind (Exh. BSG-5, p.

The Company agrees with the Attorney General that using the weighted average of the head and tailblocks method represents an improvement to pricing the incremental space heating use. Accordingly, the Company states that it now proposes to employ the method employed in D.P.U. 87-122 rather than its initial proposal and agrees that the Department should not deviate from

this precedent (Company Brief, p. 132)

2. Analysis and Findings

Although the Company's use of effective degree days in calculating its weather normalization adjustment represents a departure from Department precedent, we find that the Company's proposal more accurately reflects actual weather conditions by accounting for wind chill. Accordinqly, we find the Company's weather normalization adjustment calculation to be acceptable However, we note that this finding is specific to Bay State only and we will consider proposals by other LDCs to use effective degree days in their WNA calculations on a case by case basis

Regarding the revenue adjustment for weather normalization the parties are in agreement that the Department should not deviate from its precedent regarding the calculation of incremental rate to be applied to weather-adjusted volumes. Accordingly, the Department finds that the Company's proposed net revenue adjustment for weather normalization is $2,567,845.

B. Off-System Sales

The Company proposed to adjust test year off-system sales by 365,000 MMBtu, resulting in a reduction in test year net revenues of $1,152,638 (Exh. BSG-5, p. 18). The Company proposed this adjustment to account for:

(1) $770,150 due to the termination of the Berkshire Gas Company sales contract to purchase 90,000 MMBtu per year; and the reduction in purchase volumes for the Colonial Gas Company c tract from 425,000 MMBtu to 150,000 MMBtu per year; and

(2) $382,488 due to abnormally high test year off-system sales (181,274 MMBtu) as a result of the timing of customer purchases during the test year. According to the Company, during the winter season, which runs from November 1 through April 30, on average its customers purchased less than the monthly contractual volumes in November and December 1990 and more than the monthly contractual volumes from January 1991 through April 1991 to fulfill their total seasonal purchase obligations. Conversely, customers purchased more than the monthly contractual volumes in November and December 1991 and, thus, the Company states, the test year off-system sales were abnormally high (id., pp. 18-19).

1. Positions of the Parties

a. The Attorney General

The Attorney General argues that the Company should actual test year off-system sales in determining rates because there is no evidence on the record that the test year volume of off-system sales is not representative of what will occur in the first year that the new rates will be in effect (Attorney General Brief, pp. 77-78). The Attorney General states that the Company's five year sales volume forecast projects higher off-system sales during the first year that the new rates will be in effect than occurred in the test year (id.). In addition, the Attorney General states that from year to year the volume sold and the contracts in existence are in constant fluctuation (id.

In regard to the Company's proposal to collect any difference in revenues received from off-system sales through an adjustment to the Company's CGAC, the Attorney General asserts that the Company did not present this proposal until the last day of hearings, on redirect examination (Attorney General Reply Brief, p. 27, citing Tr. XVIII, pp. 19-20). Thus, the Attorney

General contends that the proposal is so untimely as to leave the intervenors with inadequate notice and opportunity to respond to the Company's request (id.). Accordingly, the Attorney General states that the Department should follow precedent and reject the Company's proposal (id., p. 28).

b. The Company

The Company asserts that its proposed adjustments to test sales to off-system customers are appropriate and accurately reflect its best estimate of what will occur during the first that the new rates will be in effect (Company Brief, p. 127). However, because of disagreement over its estimate of off-system sales, the Company proposes to collect any difference in revenues received from off-system sales from the existing amount in the test year cost of service through an adjustment to the Company's CGAC (id.

The Company disagrees with the Attorney General's assertion that this proposal was not made until the last day of hearings, and asserts that the proposal was initially filed in the response to a Department information request provided on July 30, 1992 (Company Reply Brief, pp. 37-38, citing Exh. DPU-108). The Company contends that, therefore, the Attorney General had adequate opportunity to investigate the proposal prior to the close of the record (id.) Accordingly, the Company concludes the Attorney General's arguments are without merit and the Company's proposal should be approved by the Department

(id., pp. 38-39)

2. Analysis and Findings

In setting base rates, the Department does not ensure dollar for dollar recovery by the Company of its costs and expected profits. Rather, base rates are designed to recover a reasonably representative level of expenses. See Western Massachusetts Electric Company, D.P.U. 90-300, p. 71 (1990); Western Massachusetts Electric Company, D.P.U. 85-270, p. 194 (1986).

Accordingly, the Department rejects the Company's proposal to collect any difference in revenues received from off-system sales through an adjustment to the Company's cost of gas adjustment clause. The Department's articulated standard for adjustments made to a company's test year expense requires that the adjustment represent a known and measurable change. See Commonwealth Electric Company, D.P.U. 89-114/90-331/91-80, p. 101 (1991). We find that, because the Company's off-system sales are not constant, the Company's proposed adjustments are not representative of a known and measurable change in off-system sales. Therefore, we find that no adjustment shall be made to the Company's test-year sales to off-system customers.

C. Customer Fees and Charges

The Company proposed the following fees and charges to be billed to individual customers for activities that the Company asserts contribute to bad debt.

- Customer Reconnection Fee: To be assessed when service is turned back on for a customer whose meter had been

locked for non-payment (Exh. BSG-3, p. 6). The Company proposes to increase this fee from $5.00 to $15.00 for regular office hours (id., Sch. 3-5).

- Field Collection Fee: To be assessed when a Company collector visits the customer's premises and receives full payment of an overdue account in lieu of disconnecting service for non-payment (id., pp. 6-7). The Company proposes to set the fee at $8.50 (id., Sch. 3-5).

- Customer Warrant Fee: To be assessed when the Company must obtain a warrant to gain access to the customer's premise to disconnect service for non-payment (id., p. 7). The Company proposes to set the fee at $35.00 (id., Sch. 3-5).

- Customer Non-Gas Late Payment Charge: To be assessed at the monthly rate of 1.5 percent on non-gas accounts receivable that are 30 days overdue (id., p. 7). Non-gas receivables consist primarily of appliance rental and customer service revenues (id., Sch. 3-6).

- Customer Returned Check Fee: To be assessed when a customer's check payment has not been accepted for deposit twice by the Company's bank and is returned to the Company (id., p. 7). The Company proposes to set the fee at $6.25 (id., Sch. 3-7).

1. Positions of the Parties

a. The Attorney General

The Attorney General states that the Department should reject all of these proposed charges, which fall primarily on residential ratepayers who are experiencing financial difficulties, because during these difficult economic times they are "mean spirited" (Attorney General Brief, p. 135).

b. The Company

The Company contends that its proposed fees and charges are appropriate (Company Brief p. 214). The Company asserts that its intent through such fees and charges is not to generate

significant revenues but rather to deter the activities and reduce potential bad debts by assigning these extra costs to the responsible customers (Exh. BSG-3, p. 6). In addition, the Company maintains that all of its customers will benefit from the proposed customer fees because both bad debt and these fees are included in the cost of service (Company Brief, p. 214)

2. Analysis and Findings

With the exception of the field collection fee, the Department finds that all of the above fees and charges are reasonable and consistent with the Department's fairness goal in rate design. See Massachusetts Electric Company, D.P.U. 92-78, pp. 212-213 (1992). As stated by the Company, the purpose of these fees and charges is not to generate significant revenues, rather to mitigate future bad debt costs. Therefore, the Department finds that the customer reconnection fee, the customer warrant fee, the customer non-gas late payment charge, and the customer returned check fee are acceptable as proposed by the Company.

With regard to the customer warrant fee, the number of warrants may be reduced if the Company informs the customer in advance that if access to the premises is denied and the Company must obtain a warrant, a warrant fee will be imposed. Accordingly, the Department orders the Company to send a notice to this effect prior to obtaining a warrant.

With regard to the customer non-gas late payment charge,

placing this charge on the same bill as the bill for gas consumption may lead to customer confusion. Therefore, the Department orders the Company when assessing the non-gas late payment charge to do so on a separate invoice from the gas bill.

With regard to the field collection fee, the Department finds that it is not necessary for the Company to go to a customer's premises to receive payment of an overdue account. Accordingly, the Department finds that the field collection fee shall not be assessed to customers. If the Company so chooses it may simply refuse to allow field collectors to accept payments from customers.

We direct the Company to provide notice to its customers of these charges within 60 days of the date of this Order. The notice shall be in the form of a customer bill insert and shall be presented to the Department's Consumer Division for approval within 30 days of the date of this Order.

D. Rental Programs

The Company operates a appliance rental program for both its residential and C&I customers (collectively the "rental programs"). Under these programs, the Company rents gas water heaters and gas conversion burners.

The Company has treated the rental programs on an above-the-line basis: all revenues and expenses associated with these programs have been included in the cost of service calculation (Tr. IV, p. 62). The Company provided an analysis of the

incremental costs and incremental revenues which result from the rental programs (Exh. AG-61). The Company determined that the residential program produced a deficiency of $42,810, and the C&I program produced a surplus of $16,796 (Exh. AG-61). The net impact of the Company's incremental analysis is a revenue deficiency of $26,014 (id.).

The Company stated that it does not propose to adjust its of service to offset this net deficiency (Tr. IV, pp. 63-64). The Company states that the incremental analysis is based on numerous assumptions, such as the allowed return on equity of the Company, which are likely to change as a result of the instant proceeding (id.) The Company states that any change in the assumptions in the incremental analysis will impact the level of the deficiency, possibly eliminating it (id.). The Company states that the final net deficiency or net excess will be reflected in the revenue deficiency (id.). None of the other parties addressed the Company's rental programs.

The Department has found that an incremental cost analysis is necessary for rental programs when a company proposes above-the-line accounting treatment. Commonwealth Gas Company, D.P.U. 87-122, p. 20 (1987); Essex County Gas Company, D.P.U. 87-59, 11,14 (1987). In addition, the Department stated that it is inappropriate to allow a company to recover through utility rates the incremental loss that results from an above-the-line rental program. Commonwealth Gas Company, D.P.U. 877-122, p. 24 (1987)

The Department agrees with the Company that the deficiency would change in response to a new rate of return. Accordingly, the Department concludes that the incremental costs associated with the rental programs should be adjusted downward to reflect the lower expenses attributable to return on ratebase and income taxes. However, the Department concludes further that the Company has not included all incremental costs associated with the operation of its rental program. As discussed in Section VIII.Y, infra, the Department concludes that the Company incurred $209,484 in advertising costs attributable to the rental programs, and $47,750 in rebate payments to customers who participated in these programs. The Department finds that the reduction in costs associated with the lower rate of return do not offset these additional O&M expenses, and we conclude that the Company's rental programs produced a net deficiency of $36,600. Accordingly, the Department will impute $36,600 in revenues to the rental programs. Once this adjustment is made, the Department finds that the expenses associated with the rental program can be included in the Company's cost of service.

VIII. EXPENSES

A. Payroll Expense

The Company proposed to increase test year O&M expense by $2,840,157[32] to reflect adjustments for both straight time and overtime recoverable O&M payroll expense for each of its three classes of employees: (1) union; (2) clerical and technical ("C/T"); and (3) administrative, professional and supervisory ("APS") (Exh. BSG-4, Sch. 4-4, Revised, p. 1). Bay State proposed several adjustments to test-year payroll expense. First, the Company annualized its year end payroll expense for each of its three employee groups to account for any payroll increases and the addition (or removal of any employees that may have occurred during the test year in order to present a more accurate representation of test-year payroll expense (Exh. BSG-4, pp. 9-12). The Company then adjusted the test year-end annualized payroll to remove employees who worked entirely for non-utility operations and other jurisdictions (id., p. 9) Additionally, the Company removed temporary employee payroll amounts and payroll related to employees in the Conservation and Reliable Efficient Services ("C.A.R.E.S.") program, whose payroll expense is recovered through a separate base rate charge (id., pp. 9-10)

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[32] This amount represents the sum of total payroll increases for 1991, 1992 and 1993 of $581,459, $1,822,101 and $1,512,818, respectively, multiplied by an O&M payroll factor of 72.52 percent (Exh. BSG-4, Workpaper 4-5, p. 2)

No party disputed these adjustments.

Bay State increased its adjusted recoverable O&M union test-year payroll expense by an average of 4.8 percent for 1992 and an average of 3.15 percent for 1993 to account for payroll increases either agreed upon in contract negotiations or committed to by the Company's management (id., Workpaper 4-1, Revised, p. 2). The Company also increased its adjusted recoverable O&M payroll expense for its APS and C/T employees by an average of 4.52 percent for 1992 and 3.75 percent for 1993 to reflect proposed pay increases (id., pp.

1. Union Increase

Bay State proposed an increase of $1,338,886 to reflect both straight time and overtime recoverable O&M adjustments for wage increases that occurred in 1991 and 1992 and are scheduled to occur in 1993 for its union employees (id., Workpapers 4-1, Revised, p. 1, 4-2, Revised, p. 1). The Company's union employees are members of one of five union locals: Brockton Local 273 of the Utility Workers of America; Springfield Local 12026 of the United Steelworkers of America; Springfield Local 112 of the International Federation of Professional and Technical Engineers; Springfield Local 486 and Lawrence Local 326 of the International Brotherhood of Electrical Workers (id., pp. 10-11 For 1992, these union employees received wage increases of 4.5 percent, 4.75 percent, 4.75 percent, 4.75 percent, and 5.25 percent, respectively, pursuant to the terms of their contracts

with the Company (Exh. BSG-4, pp. 10-11). The Company included a 3.75 percent increase for each of the three Springfield locals which will take place in the first half of the rate year in 1993, but excluded Lawrence 326, because the effective increase date falls beyond the midpoint of the rate year[33] (id., p. 11). Brockton 273 is the only local whose proposed 1993 wage increase is governed by a signed contract with the Company while none of the three Springfield locals have a written contract with Bay State governing any 1993 wage increases (Exh. AG-266, Sect. 11)

a. Positions of the Parties

i. The Attorney General

The Attorney General took no position regarding the union straight time and overtime 1991 and 1992 payroll increases. Additionally, he raised no issue with the Company's proposed 1993 payroll increase for employees belonging to Brockton local 273. However, he argues that Bay State's proposed 1993 straight time and overtime payroll increases for Springfield locals 12026, 112, and 486 should be disallowed since there are no written contracts between the Company and the three locals covering the proposed 1993 increases (Attorney General Brief, pp. 33-34). The Attorney General contends that under the Department's standard articulated in Fitchburg Gas and Electric Light Company, D.P.U. 1270/1414,

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33 The midpoint of the rate year is defined as six months from the date of the Department's order. Essex County Gas Company, D.P.U. 87-59, p. 33 (1987).

p. 14 (1983) "Fitchburg"), the proposed adjustments for these union locals are not known and measurable and therefore, fail to meet the Department's standard for inclusion in cost of service p. 33).[34]

ii. The Company

The Company agrees with the Attorney General that the precise percentage increase for the Springfield union employees is not known (Company Brief, p. 50). The Company asserts, however, that management is committed to an increase of at least 3.75 percent, which is equal to the rate of inflation over the year (id.) The Company contends that this increase is conservative given the other objectives Bay State wishes to achieve in union negotiations such as a benefit choice, health care program and the elimination of post retirement health care costs for employees under 45 years of age (id., p. 50).

The Company further asserts that the three contracts for the Springfield locals will be finalized prior to the midpoint of the rate year (id., p. 51) Accordingly, the Company concludes that "both logic and fairness dictate that Bay State's cost of service reflect this conservative increase" (id.).

b. Analysis and Findings

The Department's standard for post test year union payroll increases is well-known and requires that two conditions be met

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34 The Department notes that the Fitchburg standard applies only to post-test-year non-union increases. Id.

in order for such a change to be known and measurable: (1 the proposed increase must take place before the midpoint of twelve months following the issuance of the Department's Order; and (2) proposed increases must be based on signed contracts between union locals and company. Massachusetts Electric Company, D.P.U. 92-78, p. 19 (1992); Commonwealth Gas Company, D.P.U. 87-122, pp. 54-55 (1987); Essex County Gas Company, D.P.U. 87-59, p. 30 (1987); Western Massachusetts Electric Company, D.P.U. 86-280-A, p. 74 (1987). In the instant case, there are no signed union contracts covering any proposed straight time and overtime payroll increases for the three Springfield union locals. Accordingly, the Department orders the Company to reduce the cost of service by $210,657, representing $183,182 in straight time payroll expense and $27,475 in overtime payroll expense

Although the reasonableness of the union payroll increases was not in contention by any party in this case, in future rate cases the Department will expect all utilities, where possible, to provide comparative analyses of proposed union payroll adjustments, as an aid in determining the reasonableness of their proposed union increases. Both current union wage levels proposed union wage increases should be examined in relation to other New England investor-owned utilities and to companies in a utility's service territory which compete for like-skilled empl ·ees. See Massachusetts Electric Company, D.P.U. 92-78

pp. 19-20 (1992).

2. Non-Union Increase

The Company proposed to increase test year O&M expense by $1,501,272 to reflect both straight time and overtime payroll adjustments for salary increases that occurred in 1991 and 1992, and are scheduled to occur in 1993 for its APS and C/T employees (Exh. BSG-4, Workpapers 4-1, Revised, p. 1 and 4-2, Revised, p. 1). Bay State offered evidence that the percentage of non-union increases has been decreasing, from 8.38 percent in 1982 to the revised 3.75 percent proposed for 1993 (id., Sch. 4, p. 2). Additionally, the Company presented evidence comparing its own employee salary levels to the market for similarly skilled employees in its service territories (RRs-DPU-27 through 29; Tr. VII, pp. 146-157). As with the Company's proposed union wage increase described supra, no party raised specific issues regarding overtime or 1991 straight time increases.

a. Positions of the Parties

i. The Attorney General

The Attorney General urges the Department to reject the proposed 1992 and 1993 straight time and overtime salary increases for APS and C/T employees. The Attorney General argues that the Company's proposal does not comply with Department precedent because: (1) the proposed increase is unreasonable given the current economic conditions within the Commonwealth;

and (2) the proposed increase is not evidenced by an express written commitment from Bay State's management to grant increases (Attorney General Brief, pp. 30-31).

The Attorney General states that costs to the Company for hiring new employees and retaining existing employees are lower because the economic conditions and high unemployment in the Commonwealth reduce the salary levels employees are willing to accept (id., citing Tr. VII, p. 151 and Tr. VIII, pp. 62-64). The Attorney General asserts, therefore, that the Company can both attract and retain well qualified employees without increasing salaries (id., p. 32).

Regarding the proposed 1993 increase, the Attorney General asserts that the Company has not provided a letter from management or the board of directors to demonstrate its express commitment to grant the proposed increase (id., p. 31). Attorney General contends that "a rather vague statement from one of the Company's employees" that the Company will match the 3.75 percent expected rate of inflation in its 1993 union increases does not meet the Department's standard, which requires an express management commitment to grant an increase (id.). Accordingly, the Attorney General concludes that the proposed non-union increase is not known and measurable and should therefore be rejected (id., pp. 31-32).

ii. The Company

Bay State addresses the Attorney General's arguments

regarding the reasonableness of the proposed increases by stating that the Company has thoroughly researched salary levels for its non-union employees in comparison to salaries paid by utility and general business employers on the regional and national level (Company Brief, pp. 54-55). The Company states that the projected increases reflect the current state of the economy because they are much lower than those granted in the past (id., p. 54). The Company argues that the Attorney General's assertions regarding Bay State's ability to retain employees without a wage increase is not supported by record evidence, and maintains that the Attorney General's position that no increases should be granted is "short-sighted and contrary to the Company's position of attracting competent employees" (id.).

The Company argues that the testimony of Mr. Sherman, its Executive Vice President, Chief Financial Officer and a member of the Board of Directors, who stated that the Company was committed to a 3.75 percent increase for non-union employees in 1993, meets the Department's standard that the Company present an express commitment from management to grant the increase (id.; Tr. VII, p. 178). The Company asserts that Mr. Sherman's testimony, subject to cross-examination by the Attorney General, is not a "vague statement", and is "at least as credible" as a letter in evidencing the Company's express commitment to grant the increases (id., pp. 54-55)

b. Analysis and Findings

In deciding the propriety of prospective non-union wage adjustments, the Department applies a three-part standard. To meet this standard, a company has the burden of demonstrating: (1) an express commitment by management to grant the increase; (2) an historical correlation between union and non-union raises; and (3) an amount of increase that is reasonable D.P.U. 1270/1414, p. 14 (1983). The Department finds that the Company has already implemented its 1992 non-union payroll increase; it is known and measurable, and consistent with union raises. Boston Gas Company, D.P.U. 88-67, p. 85 (1988). Accordingly, The Department allows the Company to include this 1992 increase in its cost of service.

The Fitchburg standard does not specifically define what form management's express commitment to grant the increase must take. Mr. Sherman, Bay State's Executive Vice President, Chief Financial Officer and member of the Board of Directors, has testified under oath that the Company is committed to a 3.75 percent increase for its APS and C/T employees. The Department finds that testimony on the record by one of the Company's most senior officers is compelling evidence of Bay State's express commitment to grant a 3.75 percent increase for both its APS and C/T employees in 1993.

In the instant case, the Company presented 11 years of percentage payroll increases granted to both union and non-union employee groups, which show a high degree of historical

correlation (Exh. BSG-4, Sch. 4-4, p. 2). Thus, we find that the second leg of the Fitchburg standard has been met by the Company.

The Attorney General has presented no quantifiable record evidence supporting his claim that the Company's proposed non-union increases are "unreasonable" and should be rejected by the Department. However, in viewing record evidence, it is apparent that the percentage of non-union increases has been continually decreasing, from 8.38 percent in 1982 to the revised 3.75 percent proposed for 1993. It is also clear from the record that the Company has performed, with due diligence, a comparison of its own employee salary levels with respect to the market for similarly skilled employees in its service territories Accordingly, we find that the Company's proposed 1993 straight time and overtime non-union increases meet the Fitchburg standard and may be included in the Company's cost of service.

In future rate cases, as an aid in determining reasonableness of proposed nonunion salary and wage adjustments, the Department will expect all utilities, where possible, to provide comparative analyses of their proposed nonunion salary and wage adjustment. Both current non-union salary and wage levels and proposed merit increases should be examined in relation to other New England investor-owned utilities and to companies in a utility's service territory which compete for similarly skilled employees. Massachusetts Electric Company, D.P.U. 92-78, p. 25 (1992).

B. FICA Expense

Bay State proposed to increase test year cost of service by $169,642 to reflect the Company's portion of FICA taxes paid on proposed payroll increases. The contribution rate of 7.65 percent consists of two parts: (1 6.2 percent for Old Survivors, and Disability Insurance ("OASDI"); and (2) percent for medicare insurance (Exh. BSG-4, Sch. 4-3, Revised) Because the Department ordered the Company to remove $259,077 from its cost of service relating to the disallowance of certain proposed payroll expenses (See Sections VIII.A and VIII.W, supra), 7.65 percent of this amount or $19,054, representing proposed FICA taxes on the disallowed increase must also be removed from test year cost of service.

C. Health Care Expense

The Company requested an adjustment to its test-year health care expense of $288,513[35] to reflect increases in premiums from its health care insurance providers which provide both indemnity and health maintenance organization ("HMO") type

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[35] The Company calculated its adjustment to health care expense by multiplying the total number of employees covered under the various plans as of January 1, 1992 by the net annual rates (premium rate reduced by employee contributions less the total group health insurance expense booked during the test year) for each plan that will be in effect on January 1, 1993 (Exh. BSG-4, p. 8). This amount was then multiplied by a factor of 70.30 percent, representing the O&M expense portion of total combined utility and non-utility allocations, to derive the amount of O&M group health insurance expense that is recoverable as a known and measurable test year adjustment (id., Sch. 4-3 Revis ³ and Workpaper 4-6, p. 2).

plans (Exh. BSG-4, Sch. 4-3, Revised). The Company stated that it has taken certain steps to control its health care costs, including: (1) Blue Cross-Blue Shield's audit program, which has yielded a return to the Company of $13,951 to date; (2) an arrangement with Insurance Cost Control of Worcester, which audits Blue Cross-Blue Shield medical claims after Blue Cross has performed its audit; and (3) a "bounty" system where employees are compensated for waiving coverage under the Company's health plan by receiving health insurance coverage through spouses' plans (Exhs. DPU-12; DPU-14; and DPU-16). Additionally, the Company has instituted a program where employees are encouraged to closely monitor their Blue Cross bills, being rewarded with one-half of any error amount up to $500 (Exh. DPU-15)

1. Positions of the Parties

a. The Attorney General

The Attorney General argues that the Company has not made a sufficient effort to reduce health care costs (Attorney General Brief, p. 68). The Attorney General asserts that, despite the implementation of a benefit choice plan for non-union employees, the Company's package does not provide sufficient incentive for Company employees to either enroll in an HMO type health care plan or to pay the difference for more extensive benefits provided by indemnity type health plans (id., pp. 68-69). The Attorney General contends that the Department should recast Bay State's actual health insurance costs to assume that Company

employees enrolled in an indemnity type of health care plan contribute 50 percent of the cost differential between full indemnity plans and the average HMO plan to encourage the Company in structuring its benefit choice program (id., pp. 69-70).

b. The Company

The Company argues that the Attorney General has disregarded its efforts in reducing health care costs (Company Brief, p. 110). In support of its position, the Company asserts that, while health insurance costs in general have been increasing at double digit rates, Bay State has been able to contain its own health insurance costs to an average rate of 5.5 percent from 1987 to 1992 (id., pp. 110-111). The Company states that this cost containment success has been achieved by: introducing managed care programs and HMOs; requiring copayments for certain medical plans; emphasis on wellness plans, such as its ongoing smoking cessation program, weight loss and blood cholesterol level checks; allowance for employee use of fitness clubs and provision of a Company-owned fitness facility; initiation of self-insurance for health care programs; and instituting a benefit choice program (id., pp. 109-111).

The Company further contends that the Attorney General implies that the Company should unilaterally force employees to increase their copayments rather than controlling its health care costs (id., p. 111). The Company argues that the amounts of health insurance copayments for union employees are set in

collective bargaining agreements and cannot be unilaterally changed until the next rounds of collective bargaining (id. Additionally, the Company contends that levels of copayments for health insurance for APS employees have traditionally been a basic component of the benefit package offered to APS employees and, again, cannot be unilaterally changed (id.). If the levels of copayments were changed, the Company argues, compensation for these employees would have to be increased to compensate for the removal of these benefits (id)

2. Analysis and Findings

The Department has stated previously that it is a reasonable expectation for all utility companies, in an era of rapidly increasing health care costs, to concentrate their efforts on health care cost containment. Massachusetts Electric Company, D.P.U. 92-78, p. 29 (1992); Nantucket Electric Company, D.P.U. 91-106/138, p. 53 (1991). Bay State's ongoing cost containment efforts are evidenced by the fact that from 1987 to 1992, health care costs to the Company have increased only 5.5 percent per year. Therefore, the Department finds that the Company has demonstrated that it has conducted a prudent review of its health care program expenses.

Although the Company has no formal program in place that provides comparative analyses of health care costs among other New England investor-owned utilities and companies in its service territory, it regularly receiv , periodicals from health care

consulting firms that are used as a basis for determining whether Company health care costs are consistent with other companies (Exh. DPU-9). In future rate cases, as an aid in determining the reasonableness of proposed health care cost adjustments, the Department will expect all utilities to provide written comparative health care cost analyses in relation to other New England investor-owned utilities along with companies in a utility's service area which compete for similarly skilled employees. See Massachusetts Electric Company, D.P.U. 92-78, p. 30 (1992).

The Department has stated that health care costs which constitute known and measurable changes to a company's test year cost of service will be granted in full. North Attleboro Gas Company, D.P.U. 86-86, p. 8 (1986). Since the Company's health care premiums are set by its providers on a calendar year basis, and the providers have presented the Company with rates to become effective on January 1, 1993, the Company's proformed health care expenses are known and measurable under Department precedent (Exh. BSG-4, p. 8 and Workpaper 4-3; North Attleboro Gas Company, D.P.U. 86-86, p. 8 (1986)) Thus, the Department denies the Attorney General's request, and will allow the Company's proposed recoverable O&M health care expense adjustment of $288,513.

D. Workers Compensation, Automobile and General Liability Insurance

Bay State included a reserve account of $100,000 in test year cost of service for prior period claims on its insurance

policies (Tr. XV, pp. 121-126; RR-DOER-1).[36] Prior to 1991, the Company had utilized traditional insurance policies incorporating low deductible amounts which provided coverage for workers' compensation, automobile liability and general liability (Company Brief, p. 129). However, during the test year, the Company initiated a self-insurance program for workers' compensation and high deductible coverage for automobile liability and general liability coverage (id.). This change in approach toward insurance requires the Company to establish a reserve account for prior period claims that have not yet been paid (Tr. XVIII, p. 61).

1. Positions of the Parties

a. The Attorney General

The Attorney General contends that the $100,000 reserve account represents retrospective payments of claims which occurred prior to the test year and thus, should be removed from test year cost of service (Attorney General Brief, p.

b. The Company

The Company argues that changing to a self-insurance program is a cost-saving measure. Ratepayers saved approximately $725,000 in the test year and an additional $120,000 in 1992 which was proformed into test year cost of service (Company

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36 The Company established a reserve account of $640,000 during the test year to cover possible claims on its insurance policies from prior years but removed $540,000 of this amount from test year cost of service (Tr. XV, pp. 121-126; RR-DOER-1).

Brief, p. 129). The Company asserts that if the Department adopts the Attorney General's proposal to disallow insurance reserve accounts, utilities would no longer have an incentive to institute self-insurance programs (id., p. 130). Further, the Company argues that if the Department reduces cost of service by the $100,000 in reserves, it must correspondingly increase the Company's test year cost of service by the $845,000 of premium savings (id.

2. Analysis and Findings

The Company's move to self-insurance and a higher deductible generated a savings of $845,000 on insurance premiums in the test year. Therefore, the Department finds it reasonable to include a $100,000 reserve account to handle prior claims in the Company's cost of service. However, the Department is disturbed by the Company's statement that without the reserve, the Company would not have an incentive to institute a self-insurance program for workers compensation. It is the Company's responsibility to serve its ratepayers in the most efficient way possible. Self-insurance for large companies is currently a reasonable approach. Even if the Department did not allow the reserve fund the Company has the obligation to set up a self-insurance program or any other cost-saving measure, where applicable, no matter what the allowed regulatory treatment.

E. Bonus and Incentive Compensation

The Company included $291,604 in its cost of service

reflecting $34,900 in extraordinary performance bonuses and $256,704 in key employee incentive compensation expenses incurred during the test year (Exh. DOER-15, Attachment Response to AG-11-11). In addition to its regular compensation system for APS and C/T employees, the Company employs an incentive compensation package designed by Towers, Perrin, Foster & Crosby which consists of the extraordinary performance bonus program and the key employee incentive plan (Exh. AG-74).

Bay State's extraordinary bonus program, applicable to all employees except grade 36 and higher, is separate from the key employee incentive compensation program and was designed to reward employees who had "done something extraordinary" during course of a year (Tr. VII, p. 158). The Company set up guidelines as to dollar limits and administrative procedures for managers to use in recommending that one of their employees be considered for an extraordinary performance bonus award (id.)

Under the Company's key employee incentive compensation plan, employees of Grade 36 or greater are eligible for incentive awards up to 30 percent of their fixed salary, based on attainment of specific goals, both for Company performance and individual performance (Exhs. AG-74 and DOER-34). For employees at the highest grades, only Company performance is considered.

employees in lower grades individual performance constitutes a higher percentage of goals (Exh. DOER-34). Individual performance goals are established and measured annually to the

extent that a participant achieves certain action plans specifically outlined through the business planning process (Exh. AG-74). Company performance is measured on the basis of firm revenues per Mcf as judged in relation to a peer group of eight Massachusetts utilities regulated by the Department (id.; Exh. DOER-34). Company performance goals are established and measured over a three-year period to help encourage long-term planning and decision making and to emphasize sustained performance results (id.)

1. Positions of the Parties

a. The Attorney General

The Attorney General asserts that, although reasonable employee bonus and incentive compensation programs are justifiable, the Company's programs are too generous and that Bay State's ratepayers should not be required to bear the cost of these programs (Attorney General Brief, p. 62). Further, Attorney General argues that the Company's bonus and incentive compensation programs are redundant because employees also get merit increases as part of the Company's compensation package (id.).

With regard to the incentive compensation program for key employees, the Attorney General argues that, at a minimum, the Department should remove that portion of the program that is based upon successful attainment of Company performance goals (id. The Attorney General asserts that one of the Company

performance goals, sustained firm revenue per Mcf, is compared to a peer group containing smaller utilities and is, therefore, flawed. He recommends that the Department remove at least fifty percent of the key employee executive incentive compensation plan expenses that relate to the portion that is assessed on the Company's per Mcf performance (id., p. 64).

b. The Company

The Company maintains that it implemented a bonus and incentive compensation plan in order to limit additional fixed salary expense while providing motivation for above-average performance (Company Brief, p. 96). The Company maintains that the results of three audits of the programs, the most recent performed in 1991,[37] support the continuation of the programs Further, the Company asserts that the bonus and incentive compensation plans have resulted in significant benefits to ratepayers by providing management an incentive to keep prices down without the possible risk of overpaying executives in relation to other utility companies (id., p. 98). The Company estimates those savings at approximately $9.5 million in the test year (id.).

Bay State argues that the extraordinary performance bonus program and the key employee incentive compensation plan are not redundant because they have separate and distinct purposes from

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37 This review was received by the Company's compensation committee on January 22, 1992.

the base salary increases (id., p. 99). The bonus program is designed to reward unique and extraordinary work during the course of a year and does not represent an overlap, as key employees are not eligible for the bonus program (id., p. 100) The Company asserts that although there is a slight overlap between annual base salary increases and the key employee incentive program, the express purpose of the key employee incentive compensation plan is to replace a portion of those managers' fixed salaries with incentive-based compensation and to encourage management to reduce costs (id., p. 101).

Regarding the makeup of the peer group used to evaluate Company performance as part of the incentive compensation plan, Bay State asserts that it included seven other Massachusetts utilities regulated by the Department which represent a fair and equitable manner of measuring its performance (id., p. 102). However, the Company states that it is not opposed to adjusting test year cost of service to reflect the exclusion of the smaller companies, Essex County and Fall River Gas Companies, in calculating the level of key employee incentive compensation to be included in the test year. The Company notes, however, that because Fall River has had the lowest gas cost in Massachusetts for seven of the last eight years, the effect would be to increase the amount of these incentive compensation awards for the test year (id.

2. Analysis and Findings

The Department finds that properly designed and administered incentive compensation programs with quantifiable performance benchmarks and defined goals along with reasonable performance rewards benefit a utility company's firm ratepayers by avoiding additional salary expense and reducing system gas costs. The Company's bonus and incentive compensation programs provide competitive compensation levels. The performance goals upon which the programs are based enhance the ability of the Company to achieve cost saving performance to benefit its ratepayers.

The Department agrees with the Company's assertion that extraordinary performance bonus program and the merit portion of Bay State's regular compensation program have differing purposes. The bonus program was designed to expressly reward outstanding achievements by employees on a more or less one-time occasion While acknowledging the Attorney General's concern regarding potential overlap or redundancy between the key employee incentive compensation program and the merit portion of the Company's regular compensation program, the Department finds this overlap to be overshadowed by the benefits produced for ratepayers, namely, lower costs.

The Department finds that the Company's use of seven Massachusetts gas utilities to comprise a peer group for measuring relative performance to be reasonable. However, in light of the Company's offer to exclude smaller utilities, the Department, in the future, will require utility companies to

expand this representative peer group to also include regulated utilities of similar size in the Northeast, where applicable

The Department finds that the Company has clearly demonstrated that its extraordinary performance bonus program and key employee incentive compensation plan are properly designed and administered and provide a benefit to ratepayers. Therefore, the Department denies the Attorney General's request to disallow a portion of test year expense relating to the Company's incentive plan and bonus program.

F. Depreciation Expense

During the test year, Bay State booked $11,599,407 in depreciation expense, resulting from a composite depreciation accrual rate of 3.13 percent (Exh. BSG-3, Sch. 3-8). The Company proposed an increase of $4,936,560 over the test year level, derived by applying a 4.17 percent composite accrual rate to the test year-end depreciable plant (id.). In support of its proposed accrual rate, the Company presented a depreciation study performed by Earl M. Robinson, president of the Weber Fick & Wilson Division ("WFW") of AUS Consultants - Utility Service Group (Exh. BSG-6, p. 1).

Using plant data as of December 31, 1991, the Company's witness employed the remaining life method to derive his recommended depreciation accrual rates (id., p. 7). remaining life method is primarily a function of two variables: the net unrecovered plant investment (plant investment less book

reserve for depreciation less expected net salvage), and the average remaining life (id., p. 9). The average remaining for an investment group is a function of the age distribution of the surviving investments, the average whole life of the group, and the mortality pattern (id.) The average remaining life annual accrual is equal to the net unrecovered plant investment divided by the average remaining life (id.).

Based on the depreciation study, the Company proposed to increase its depreciation accrual rate from 3.13 percent to 4.17 percent and maintain its book depreciation reserve by individual accounts (id., Sec. 2, Table 1). According to the study, the most significant changes in the depreciation rates occurred in Accounts 367 (Mains), 380 (Services), 386 (Other Property on Customer Premises), 391 (Office Furniture and Equipment), and 397 (Communications Equipment) (id., Sec. 1, p. 14). The Company also proposed treating rights-of-way as depreciable property (id., Sec. 4, p. 7)

1. Positions of the Parties

a. The Attorney General

The Attorney General disagrees with the Company's depreciation study in its entirety, arguing that the results violate the Department's policy of matching benefits and losses, as well as the standard of continuity (Attorney General Brief, p. 15). The Attorney General contends that the data and methodology employed by the Company's witness are fatally flawed,

inter alia, by the use of inadequate retirement data-spans and the reliance solely on retirement data (id., pp. 16, 20-25). The Attorney General also urges rejection of the depreciation study due to the sheer magnitude of the proposed increase of 32.27 percent, or 104 basis points, over Bay State's current depreciation accrual rates (id., pp. 16, 19).

Turning to the specific recommendations contained in the depreciation study, the Attorney General maintains that the proposal by the Company's witness to recognize depreciation for Account 365 (Rights of Way) is in conflict with Department precedent (id., p. 25). The Attorney General argues that land and company entitlements known as rights-of-way are not depreciable (id.).

The Attorney General also argues that the Company's witness has overestimated his proposed accrual rate for Account 367.10 (Cast Iron Mains). The Attorney General contends that the Company's witness has exaggerated the effect of the Department's regulations requiring the replacement of cast-iron pipe and joint seals, noting that the respective average remaining lives of 14.9 and 15.2 years proposed by the Company in this proceeding are far shorter than the 49-year average remaining life proposed in the Company's last rate case, D.P.U. 89-81. The Attorney General argues that the Department's Order in Cast-Iron Pipe, D.P.U. 89-254 (1991 has had little recent effect on Bay State's cast-iron pip replacement program (id., pp. 25-27). In

addition, the Attorney General contends that the installation of joint seals may reasonably be expected to extend the useful of cast-iron mains (id., p. 27)

Regarding the proposed depreciation accrual rate for Account 380 (Services), the Attorney General states that Bay State's most recent annual returns show a steady decline in the level of gas service retirements (id., pp. 28-29). Therefore, the Attorney General asserts that there will not be a continuing problem with replacing service connections because the level of retirements should decrease (id.). In fact, the Attorney General asserts that these retirements should be considered a non-recurring, non-extraordinary expenditure (id., p. 29).

Finally, the Attorney General urges the Department to exclude from the cost of service the $45,000 cost of the depreciation study (id., p. 30). The Attorney General points to the flaws in the study, as well as the alleged violations by Company of continuity considerations, in arguing that the Company is not entitled to rate recovery of the cost of the depreciation study (id.).

b. The Company

Bay State contends that the Attorney General's arguments regarding continuity and matching of costs and benefits mischaracterize the nature of the differences between the current depreciation study and the depreciation study presented by the Company in its last rate case ("Aikman Study") (Company Brief

p. 31). The Company asserts that although the final recommendations in the studies are different, both are entirely consistent in approach, methodologies, and procedures (id., p. 32). The Company asserts that, contrary to the Attorney General's suggestion, the results of the current depreciation study are not driven by average life estimates, but by greater negative net salvage values (id., p. 32). Bay State contends that the difference in results between the two depreciation studies is attributable primarily to a few isolated issues that were explained in detail by the Company's witness in both his prefiled testimony and during hearings (id.)

Bay State maintains that only approximately sixteen percent of its proposed increase in depreciation expense is attributable to a change in service life for joint seals included in Account 367. According to the Company, this change reflects the fact that the joint seals are being installed as a stop-gap measure on gas mains that will be retired long before the useful life of the seal (id.) The Company asserts that the change in the depreciation rate for joint seals represents a recognition of the interrelationship between the seals and the pipes to which they are attached, rather than a revision of the estimated life of the joint seal (id., pp. 32-33).

The Company states that a further 44 percent of the increase in depreciation expense reflects a proposed change in the net salvage rate for Account 380 (id., p. 33). According to the

Company, this increase reflects recent actual experience, and is influenced by regulations governing inactive service lines (id.) Bay State attributes the remainder of the proposed increase in depreciation expense either to changes in the actual net salvage experienced by the Company, or to reflections of plant additions made since the 1988 Aikman depreciation study (id.)

The Company concludes that actual experience and government regulations, not proposed service life changes, are driving the proposed increase in depreciation expense, and, therefore, the Company's depreciation study is consistent with its 1988 Aikman depreciation study (id. Additionally, the Company asserts that use of the Attorney General's proposed accrual rate would result in an impairment of Bay State's capital stock and would overstate the rate base reflected in future rate filings by the Company (id., p. 35).

2. Analysis and Findings

A depreciation study relies not only on statistical analysis, but on the judgment and expertise of the preparer of that study. The Department has held that where a witness reaches a conclusion about a depreciation study that is at variance with his or her engineering and statistical analysis, the Department not accept such a conclusion absent sufficient justification on the record for such a departure. Commonwealth Electric Company, D.P.U. 89-114/90-331/91-80, pp. 54-55 (1991); Commonwealth Electric Company, D.P.U. 88-135/151, p. 37 (1990)

While an analytical approach is necessary, a depreciation witness must apply his or her engineering judgment to the results of the study. The Berkshire Gas Company, D.P.U. 905, pp. 13-15 (1982).

The Department has reviewed the Company's proposed depreciation study, and our findings are noted below.

a. Account 365.2 (Rights-of-Way)

The Company's witness has suggested that rights-of-way are synonymous with easements (Tr. X, pp. 120, 134-135). The Department agrees with the Company that a right-of-way is in the nature of easements. Therefore, we find that easements rights-of-way should be accorded like treatment.

The Department does not permit depreciation of easements. Western Massachusetts Electric Company, D.P.U. 588, pp. 28-29 (1978); The Berkshire Gas Company, D.P.U. 19580, p. 16 (1978). Easements are interests in land that continue as long as the company continues to use the easements. Even if the utility lines that run through the easement are fully depreciated, there is no reason to assume that the line will be retired. Thus, although easements may be limited in use, they do not have a limited life. Therefore, as with land, there is no need to depreciate easements. Western Massachusetts Electric Company, D.P.U. 558, pp. 28-29 (1981); The Berkshire Gas Company, D.P.U. 19580, p. 16 (1978); Western Massachusetts Electric Company, D.P.U. 18252, p. 12 (1975). Accordingly, the Department rejects the Company's proposed accrual rate for Account 365.2.

The Company is hereby directed to remove $1,093 from its test year depreciation expense and to book no depreciation to this Account. Id.

b. Account 367 (Gas Mains)

The Company currently uses a composite accrual rate of 1.97 percent for Account 367 (Gas Mains) (Exh. BSG-6, Sec. 2, Table 1). The Company has proposed to use a 2.41 percent composite depreciation rate for this Account (id., Sec. 4, p. 13). This represents a range by subaccount from 1.81 percent for Account 367.6 to 5.77 percent for Account 367.5 (id., Sec. 2, Table 1). The subaccounts which most influence the proposed accrual rates are Accounts 367.1 (Cast-Iron Mains), 367.3 (Bare-Steel Mains), and 367.5 (Joint Seals) (id.).

Pursuant to 220 C.M.R. 113.00 et seq., each operator of a gas distribution system is required to develop and implement a program for the replacement and abandonment of cast-iron pipelines. However, the regulations specify a deadline for developing and implementing such a program only for cast-iron pipe installed prior to the year 1860. 220 C.M.R. 113.05 (1)(c). For cast-iron pipe that is not of pre-1860 vintage, each operator is required to establish a written time schedule for replacement or abandonment of the remainder of its cast-iron pipe, and is allowed to update, at any time during each year, the schedule for each of the next three consecutive calendar years. 220 C.M.R. 113.05 (3). While exposed or undermined pipe must be replaced,

as well as pipe adjacent to parallel excavation, there are restrictions and exceptions that may apply. 220 C.M.R. 113.06, 113.07

While the Company anticipated that it would experience greater retirements of older cast-iron and bare-steel pipe older vintages (Exh. BSG-6, pp. 4-11), the Company's witness has failed to substantiate the effect of the increased retirements on the average remaining lives. The Department finds that the Company's witness has overestimated the effect of our regulations on the Company's cast-iron pipe replacement requirements, and therefore the Company has failed to provide sufficient justification for the proposed adjustment. Accordingly, the Department rejects the accrual rates for Accounts 367.1 (Cast-Iron Mains), 367.3 (Bare-Steel Mains), and 367.5 (Joint Seals). The Company is directed to use its current accrual rate of 1.97 percent for these Accounts. Application of these accrual rates to the respective subaccounts produce a composite depreciation accrual rate for Account 367 of 1.91 percent. Accordingly, Department rejects the proposed increases in depreciation expense in the amount of $786,193 ($85,123, $40,137 and $660,933, respectively).

c. Account 380 (Gas Services)

The Company proposed the use of a 5.38 percent composite depreciation rate for Account 380 (Gas Services) (Exh. BSG-6 Sec. 4, p. 20). Other than adjustments to the average remaining

lives of the components of this Account, the Company's witness noted that this Account has historically demonstrated a negative net salvage value ranging from a negative 190 percent to a negative 326 percent (id., p. 19).

The Department agrees with the Company that it has experienced significantly larger negative net salvage values in this Account as a result of greater removal costs. It appears that the Company has taken the Department's regulatory requirement for the relacement of pre-1860 vintage cast-iron pipe within a ten-year period and inappropriately extrapolated that requirement to adjust the accrual rates for all three of the subaccounts addressed herein.[38] The Department finds that the net salvage values recommended by the Company's witness for Gas Services Account are conservative and reasonable. The proposed negative 150 percent net salvage cost for services is significantly lower than the Company's recent experiences with net salvage values, which have ranged from negative 190 percent to negative 326 percent (id., Sec. 4, p. 19). The Department finds that the Company has presented a thorough, well-documented depreciation study in support of its proposed increase in the depreciation accrual rate for this Account. Accordingly, the

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38 An accelerated accrual rate relating to pipe replacements cannot be applied for ratemaking purposes without a firm commitment by the Company to replace post-1860 vintage cast-iron pipe at a specific rate. The record in this case does not contain evidence of such a commitment by the Company.

Department accepts the Company's proposed accrual rate for Account 380.

d. Account 394.2 (CNG Equipment)

The Company proposed the use of a 10.46 percent composite depreciation rate for Account 394.2 (CNG Equipment) (Exh. BSG-6 Sec. 4, p. 35). Consistent with our findings in Section IV infra, the Company's request to recover depreciation expenses associated with this Account is denied.

e. Conclusion

In order to calculate the annual depreciation amounts based on the average service lives found appropriate, the Department has substituted the depreciation accrual rates determined supra for those accrual rates proposed by the Company that were rejected. Accordingly, the Department finds that the Company's composite depreciation accrual rate is 3.97 percent. The use of this rate results in a total adjustment to depreciation expense of $4,110,245. The Company's proposed adjustment to cost of service shall be reduced by $826,315, and the adjusted test year depreciation expense shall be $15,709,652. In addition, because we disagree with the Attorney General's proposal that we reject the study, for reasons stated infra, we deny the Attorney General's request to remove the cost of the study from the Company's cost of service.

G. Club Dues

Bay State has included in its cost of servi[illegible] $1,605 in dues

paid for membership in two private clubs, $1,105 for the Colony Club and $500 in dues paid for membership in the Lanam Club, Inc. The Company used these clubs for business luncheons and meetings (Exh. AG-3).

1. Positions of the Parties

a. The Attorney General

The Attorney General argues that the entire amount for club dues should be removed from the Company's cost of service as both are "unnecessary expenses and serve no direct benefit to the ratepayer" (Attorney General Brief, p. 59).

b. The Company

The Company did not specifically address these amounts on brief. During hearings, however, the Company's witness stated that membership in these clubs is important to the Company because they provide a professional setting for meetings (Tr. XVIII, pp. 29-30).

2. Analysis and Findings

The Department agrees with the Attorney General's assertion that no clear benefit is provided to the Company's ratepayers by these expenses. The Department believes that the Company should not have included such an expense item in its cost of service in light of our clear standard that there must be a link to ratepayer benefits. Boston Gas Company, D.P.U. 88-67, p. 114 (1988). Accordingly, we find that these costs shall be removed from the Company's cost of service, for an adjustment of $1,605.